



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,419	07/18/2003	Thomas J. Smith	FIS920030154	1418

32074 7590 07/18/2006

INTERNATIONAL BUSINESS MACHINES CORPORATION  
DEPT. 18G  
BLDG. 300-482  
2070 ROUTE 52  
HOPEWELL JUNCTION, NY 12533

EXAMINER

NGUYEN, DUC M

ART UNIT	PAPER NUMBER
----------	--------------

2618

DATE MAILED: 07/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Supplemental  
Notice of Allowability**

**Application No.**

10/604,419

**Examiner**

Duc M. Nguyen

**Applicant(s)**

SMITH ET AL.

**Art Unit**

2618

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 5/5/06 and 6/1/06.
2. ☒ The allowed claim(s) is/are 1-19.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of the:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.  
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached  
1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.  
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date <u>7/18/03</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material                              | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

### **REASON FOR ALLOWANCE**

1. The following is an examiner's statement of reasons for allowance:

As to claims 1, 10, 11, the instant application directs to a non-obvious feature improvement over the invention described in cited prior art. The non-obvious feature comprises a quantizer operable to quantize an output of the high-speed data transmission circuit relative to a level of the plurality of reference voltage levels, and in combination with a clock generator operable to generate a clock having a transitioning time which is less than one quarter of a minimum switching period of the output of the circuit.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Information Disclosure Statement***

2. The references listed in the information disclosure statements submitted on 7/18/03 has been considered by the examiner (see attached PTO-1449).
3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Ghiasi et al** (US 2004/0027993), Loop back testing structure for high-speed serial bit stream TX and RX chip set.

**Keller et al** (US 2004/0135231), An arrangement for testing semiconductor chips while incorporated on a semiconductor wafer.

**Yin et al** (US 2004/0161070), System and method for testing the operation of a DLL-based interface.

**Klement** (US 4,371,850), High accuracy delta modulator.

**4. Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

(571) 273-8300 (for formal communications intended for entry)

(571)-273-7893 (for informal or draft communications).

Hand-delivered responses should be brought to Customer Service Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314.

Any inquiry concerning this communication or communications from the examiner should be directed to Duc M. Nguyen whose telephone number is (571) 272-7893, Monday-Thursday (9:00 AM - 5:00 PM).

Or to Edward Urban (Supervisor) whose telephone number is (571) 272-7899.

Duc M. Nguyen



Oct 26, 2005